

STATEMENT OF WORK
FOR
TMACS SYSTEM UPGRADE

402DMSG/MXRIL
402d Maintenance Wing
Robins AFB GA

1.0 Scope:

- 1.1 The objective of this project is to increase and enhance the capabilities of the existing Server hosting TMACS, increase system availability and increase system response times. The server provides intranet, SQL, and authentication services for MXRIL maintained databases and database access.
- 1.2 The required service shall includes all labor, material and licenses required for operation of the upgraded TMACS System.

2.0 Hardware Enhancements:

- 2.1 The contractor shall provide a TMACS certified server with the following capabilities:
 - 2.1.1 The system shall be furnished with quad Intel CPU's and RAM designed to run the services listed in para 3.0 and licenses for unlimited simultaneous SQL users. Network licenses are provided by Robins AFB GA.
 - 2.1.1.1 The use of redundant hot-swap I/O buses is required
 - 2.1.1.2 RAM shall permit increased response by use of interleaving or a similar and equal technology. The minimum amount delivered shall be 1.0 Gb of system RAM.
 - 2.1.1.3 Redundancy shall at a minimum include:
 - 2.1.1.3.1 Power Supply

2.1.1.3.2 Cooling Fans

2.1.1.3.3 System I/O Bus

2.1.1.3.4 Processor Power Module

2.1.1.3.5 Drive Cooling

2.1.2 Storage shall be sized to permit growth of the current TMACS system by a factor of four. The storage shall be sized to permit at least two redundant backups at the maximum projected db size in addition to the operating system and services listed in para 3.0.

2.1.3 Each storage device shall provide a minimum of 80 Mb/sec sustained throughput. Storage devices shall allow exchange of the device during operation of the system (HotSwap).

2.1.4 Each device shall be compatible with the current operating system.

2.1.5 In addition to the storage devices in 2.1.2, the system shall be equipped with a DVD-RAM read-write-rewriteable drive with a minimum capacity of 9 Gb.

2.1.6 The system shall be provided with a dual channel 10/100/1000 BT network interface configured to full duplex operation with remote server administration hardware and software.

2.1.7 The system shall be delivered with all components needed for stand-alone operation.

2.2 The contractor shall configure the system for operation and test the system off-line with all services required to run TMACS running prior to placing the system in service.

2.3 The contractor shall configure the system with security provisions in accordance with WR-ALC/GA required standards.

2.4 The system shall be configured to operate a minimum of 30 minutes should primary power to the unit fail. A warning system shall be provided to alert the system administrator when power fails and an emergency shut-down is required.

- 2.5 All testing and installation activities are required to be performed during hours when the TMACS System can be placed in an off-line status. Specifically, from Monday through Friday during the hours of 6:30 AM to 4:30 PM the existing shall not be taken off-line. Actual hours shall be coordinated with the TMACS Administrator.
- 2.6 The existing system shall remain online and serve as an emergency backup to the new TMACS Server.

3.0 Software and Services

- 3.1 The following software shall be provided and configured by the TMACS contractor. The WR-ALC Physical Science Laboratory personnel shall provide installation Specific to the site network.

- 3.1.1 Microsoft Windows Server Enterprise 2003 (or latest version)

- 3.2 The following software shall be provided and configured by the TMACS contractor WRALC-EN personnel shall provide technical assistance for network access

- 3.2.1 Microsoft Internet Information Service Version 6.0 or later with latest SP

- 3.2.2 TMACS Intranet Software Version 3.1

- 3.2.3 TMACS Gateway Software Version 1.9

- 3.2.4 TMACS Remote Installation Services Version 1.8a

- 3.2.5 GUS Version 1.3

- 3.2.6 LMM Version 1.8

- 3.2.7 EN Intranet current version

- 3.2.8 EN Projects Intranet Database and software, latest version

- 3.2.9 SQL Databases for each of the items in paragraph 3.2 shall be configured and made available for use on the TMACS System upon completion

- 3.2.10 TMACS Upload component, latest version

3.3 The following services shall be configured on the system by the TMACS contractor. EN shall provide access and technical assistance

3.3.1 Remote Data Services (ADC)

3.3.2 TCP/IP networking

3.3.3 IIS 6.x, latest version

3.3.4 DSN / OLE for TMACS

3.3.5 ISQL Services

3.3.6 SQL Backup Services

3.3.7 Net DDE

3.3.8 Net DDE Executive

3.3.9 TMACS Backup Version 3.1

3.4 The existing SQL 2000 TMACS Db shall be ported to the new server, verified, configured and tested by the TMACS contractor. The documentation shall include the procedures used and a listing of the tables converted along with the number of entries converted. The before-convert databases shall be archived.

3.5 The system shall be configured for redundancy between the existing server and the new unit. Should either unit fail, the other shall be fully capable of going on line.

3.6 The system database shall be mirrored or replicated to a second location on the backup server. All data shall exist in its latest form on both systems.

3.7 The system shall be configured to provide information on-demand showing the time and origin of access to the system, duration, location of access and area of access.

4.0 Installation, Testing and Documentation

- 4.1 The contractor shall install the hardware in Bldg 321 at Robins AFB Ga. The software and services may be configured off-site; however, final testing shall be conducted at Bldg 321 Robins AFB Ga prior to implementation**
- 4.2 The contractor shall provide telephone support for all hardware, software and services for a period of one year from the final installation date**
- 4.3 Two copies of a system manual shall be provided with printed documentation of the configuration of all software and services, hardware, hardware configuration and test data**